

REMARKS

Entry of the foregoing and further and favorable reconsideration of the subject application in light of the following remarks, pursuant to and consistent with 37 C.F.R. § 1.112, are respectfully requested.

By the foregoing amendment, the specification has been amended as requested by the Examiner. Claims 1-5 and 15-17 have been amended to further clarify Applicants' invention, and new claim 26 has been added. Support for amended claim 1 can be found on page 9, lines 7-16, of the specification. No new matter has been added.

I. Abstract

Please add the new Abstract of the disclosure, which can be found at the end of this Amendment and Response on a separate sheet of paper.

II. Oath/Declaration

Please find attached a new copy of the declaration.

III. Claim Objections

The claims have been amended as requested by the Examiner.

IV. Rejections Under 35 U.S.C. § 112 and § 101

The rejections of claims 3 and 17 under 35 U.S.C. §§ 101 and 112, second paragraph, have been rendered moot in view of the amendments to the claims.

V. Rejections Under 35 U.S.C. § 102

Claims 1, 3, 14, 15 and 17 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Tolstoshev et al. (U.S Patent No. 5,705,355). Applicants respectfully traverse this rejection.

The claimed invention relates to, *inter alia*, a polypeptide having a molecular weight of about $12,000 \pm 1$ kD with the biological activity of an inhibitor of collagen-dependent platelet adhesion, wherein said polypeptide binds to collagen thereby preventing the adhesion of platelets to collagen.

Tolstoshev et al. (U.S. Patent No 5,705,355) does not teach or suggest the claimed invention. In particular, this references does not teach a polypeptide that is an inhibitor of collagen-dependent platelet adhesion, wherein the polypeptide binds to collagen thus preventing the adhesion of platelets to collagen. Tolstoshev et al. teaches a classical protein, hirudin, that specifically binds to thrombin. See column 1, lines 60-63; column 1, line 66 to column 2, line 7, of Tolstoshev et al. Furthermore, Orevi et al. (U.S. Patent No. 5,246,715 cited by the Examiner) also teaches that hirudin inhibits platelet aggregation induced by thrombin (see column 3, lines 11-12, of Orevi et al.).

The Examiner has stated that Tolstoshev et al. teaches that the disclosed protein is an inhibitor of platelet adhesion (column 1, lines 65-66). However, the protein of Tolstoshev et al. inhibits platelet adhesion by binding to thrombin, which catalyzes the hydrolysis of fibrinogen to form fibrin strands (the resulting fibrin combines with activated platelets to form a clot). This is very different from the claimed invention where the claimed polypeptide binds to collagen to inhibit platelet adhesion.

Tolstoshev et al. clearly does not teach every element of the claimed invention. Accordingly, this reference is not anticipatory.

Therefore, applicants respectfully request withdrawal of this rejection.

VI. Rejections Under 35 U.S.C. § 103

Claims 1, 2 and 14-17 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Friedrich et al. (U.S Patent No. 5,523,287) in view of Tolstoshev et al. (U.S Patent No. 5,705,355). Applicants respectfully traverse this rejection.

Like Tolstoshev et al., Friedrich et al. also does not teach or suggest the claimed invention. This reference is related to thrombin inhibitors from assassin bugs, not collagen-dependent platelet adhesion inhibitors. Further, this reference does not teach or suggest a polypeptide with a molecular weight of approximately 12,000 kD.

The disclosure of Tolstoshev et al., as discussed above, does not correct the deficiencies of Friedrich et al.

Thus, based on the foregoing, the skilled artisan would not be motivated by Friedrich et al. and Tolstoshev et al., singly or in combination, to look for, isolate and/or use a polypeptide having the claimed features. Nothing in these references even indicates the polypeptide exists.

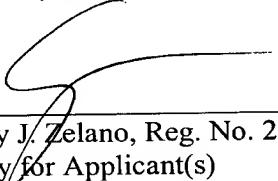
Appl. Serial No.: 09/936,737
Attorney Docket No.: MERCK-2299
Reply Dated October 2, 2003
Reply to Office Action of July 2, 2003

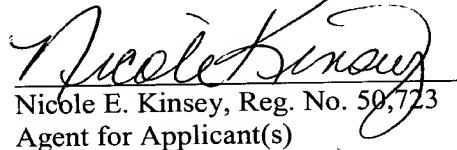
In view of the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order. Such action is earnestly solicited.

In the event that there are any questions relating to this application, it would be appreciated if the Examiner would telephone the undersigned attorney or agent concerning such questions so that prosecution of this application may be expedited.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,


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